Climate science project to understand role of the Amazon

13 April 2016 - Further understanding the links and interactions between the Brazilian Amazon rainforest and the world's climate is the focus of a major new research programme, funded by the Newton Fund

The three-year £4-million program, known as Climate Science for Service Partnership (CSSP) Brazil, will bring together scientific researchers and organisations from the UK and Brazil, in partnership, to understand more about this important region and its relationship to climate change.

Professor Stephen Belcher is Director of the Met Office Hadley Centre for Climate Science and Services, which is leading the UK's contribution to the project. He said: "The Amazon rainforest has a fascinating two-way relationship with the world's climate. The forest helps to regulate our climate by absorbing carbon dioxide, but it is also widely anticipated to be affected by increasing climate change.

"The research program aims to understand more about the factors affecting the forest, such as land-use change and carbon stocks, and use these factors to improve global climate models. Armed with this improved information, we hope to have a better understanding of the relationships between the world's largest area of tropical forest and the rest of the planet.

"Another aspect of the project will be to investigate the risks of a changing and changeable climate for Brazil, improving monitoring and understanding of impacts and extreme weather, and projections of how they might change in the future."

Through a shared program of research, this Newton Fund initiative - funded by the Department for Business, Innovation and Skills (BIS) - hopes to boost climate mitigation and adaptation strategies to support resilient economic development and social welfare: factors which can be affected by severe weather and climate change.

Jo Johnson is the Minister of State for Universities and Science. He said: "The Amazon rainforest is so rich in beauty and biology, and this £4 million programme will provide our world-leading scientists with a unique opportunity to tackle one of the biggest challenges facing mankind - climate change. By protecting the science budget and investing in research to address global challenges, we are making sure the UK remains a global science powerhouse."

Professor Belcher added: "Through CSSP Brazil we will build on the strong relationships between UK and Brazilian scientists and institutes, drawing on the expertise of individual institutes and developing our shared capability."

Within Brazil, the partnership includes: The National Institute of Amazonian Research (INPA); the National Institute for Space Research (INPE); and the National Centre for Monitoring and Natural Disaster Alert (CEMADEN).

Dr Osvaldo, of CEMADEN, said: "CSSP Brazil represents a unique opportunity for the Ministry of Science, Innovation and Technology (MCTI) and its institutes - INPE, INPA and CEMADEN - to advance in many directions. It is important to emphasise that CSSP Brazil provides an opportunity to improve the deliverables from these institutes to the Brazilian society.

"As well as the traditional means of scientific cooperation through data and knowledge exchange in order to better understand how the natural system works, the partnership represents a great opportunity for training and education. CSSP Brazil is a continuation of the intense and historic scientific interchange between the UK and Brazil."

Director of INPA, Dr Luiz Renato de Franca, considers that this partnership will bring mutual benefits to the institutes involved: "There is no doubt that it's time to think globally, and INPA and the other institutes involved have amassed a great expertise about climate change on the broad scale. This interaction is very important for research in this area to advance significantly and allow us to improve model accuracy."

Last updated: 13 April 2016